Work Order ID 94641

December-19-12	1:30:49 PM				+()4+						
Item ID: Revision ID:	D3121-141			Accept	*N9	<b>00040</b>	100	* Se	etup Start	*N:	S1*
- •	Bracket Assemb	oly							Stop	*N!	S2*
Start Date:	12/24/12	<b>Start Qty:</b> 12.00	*12*		Cust 1	Item ID:					
Required Date:	1/11/13	Req'd Qty: 12.00	*12*		Custo						
Reference:								•			
Approvals:	Process Plan	ı: <i>[[]</i>	Date:/3-01-2	Tooling:		Date:		. R	un Start	1/1	R1*
	<b>QC:</b>		Date:	_ SPC (Y/N):		Date:	A & MIR		Stop	*N	R2*
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Houi	Too	IID Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revis	sion Nbr									
D3121	Rev I	Ε									
100		DAND CAW		0.00							
*100*		BAND SAW		0.00		3/01/20	-	12	18		
Bandsaw Jeaspa Bandsaw		Memo Cut blanks:	(1.250" x 2.000") 6.600" I		<i>G</i> ~ 1.	310112D	•				·
110				0.00							
110	-	HAAS CNC VERTICAL	_MACHINING #1	0.00	-0-121	0			$\frac{1}{2}$		
*110* HAAS I		Memo		0.00	del a	203-01-2	7	$X_{1}$			
HAAS CNC vertica	l machine #1	1-Machine	D3121-111 as per Folio Fara-Scribe batch number	A361 and Dwg D312	Hidentify as D3121-					· ·	
			· · · · · · · · · · · · · · · · · · ·		·			,			
120		QC2- Inspect parts off n	nachine FAI/FAIB	0.00		•				•	
*120*					CTCO No	201301-2	7	12	$\phi$		
QC		Memo		0.00		-0()012	. =				
Quality Control						•					

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			DQA:	Date:	
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE			•3

										QA Closed:	Date:	
Work Ord	er:				DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS	
Part I					Rework Scrap Use-as-is Work Order Update		Machining Small Fa Thermoforming Finishir		Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Init	tial	A	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief	f Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling							·					
Operator												
Material							ļ	•				
Setup		ŀ										
Other												
Process	Ц											
Supplier	Ш											
Training												
Unapproved	<u> </u>					<u> </u>						
			J			AULT	CATEC	GORY				
Landi	ng Gear			_	General				F	<b>-</b>	_	<b>-</b>
!	Bending	•			Bend	$\vdash$	rain		_	Ovalized		Pressure/Forced
		Not Conce	ntric to (	<sup>3/\$</sup>  -	BOM/Route		ardwai			Over/Under	<del></del>	Temperature/Cure
	Cracks	l (C-:		ļ	Broken/Damaged	-		on Incomplete	,, , <u> </u>	Part Incorre	<b>⊢</b>	Weld
	<del></del>	d/Crimped			Burrs	_		ons Incomplete	/Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs Heat Treat		-	Contamination	$\vdash$		nance	<u> </u>	Part Moved			
	$\vdash$	eat on Strip in	Tuba	$\vdash$	Countersink Cut Too Short	<del></del>	lislabe lisread		}-	Positioned V		704604
		in Bend	Tube	-	Drill Holes	$\vdash$	iisread ffset		L	Power Loss/	ourge	Other
		Waves in E	vtrucion	, <b>-</b>	Drawing	<b>├</b> ─┤		alibration				
				' <u> </u>	Finish	$\vdash$						
•			Folio		Out of Sequence Outside Dimensions							

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Memo

Quality Control

											DQA:	Date:	
NCR:	Yes	/ No					WORK ORDER NON-C	100	NFORI	MANCE / UPDATE			<del>2</del> 2
							<del> </del>	-			QA Closed:	Date:	
Nork Ord	er:						DISPOSITION			AGAINST D	EPARTMENT	PROCESS	
Part	No.						Rework Scrap Use-as-is			Skid-tube Crosstube Small Fab	<b>⊣</b>	Water Jet d. Eng. Coor.	Engineering Quality Other
NCR	No.						Work Order Update	]		Large Fab Composite		Supplier	
Root					Des	crip	otion of work order update		nitial	Action	Sign &		
Cause		Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Description	Date	Verification	QC Inspector
oc/Data													·
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etup													
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rocess													
upplier								1				`	
raining													
napproved													
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Land	ng (	Gear			_		General						
	L	Bending			Į		Bend		Grain		Ovalized		Pressure/Forced
	<u></u>	Centre No	t Concer	ntric to C	D/S		BOM/Route		Hardwa	ıre	Over/Under	tolerance	Temperature/Cure
	L	Cracks					Broken/Damaged		Inspect	ion Incomplete	Part Incorred	ct ·	Weld
•		Crushed/0	Crimped.		· [		Burrs		Instruct	tions Incomplete/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs			Contamination		Mainte	enance	Part Moved					
	Heat Treat			Countersink		Mislabe	eled	Positioned V	Vrong	_			
		Inspection	n Strip in	Tube			Cut Too Short		Misread	d [	Power Loss/	Surge	Other
		Ripples in	Bend				Drill Holes		Offset	_			
		Torque W	aves in E	xtrusion	۱ [		Drawing		Out of (	Calibration			
	Turning Sequence						Finish		Out of	Sequence			

Outside Dimensions

Wave/Twist in Tube

Folio

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0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

170

\*170\*

· Quality Control

13/2/5

pl 13-02-4

											DC	QA:	Date	:
NCR:	Yes	/ No					WORK ORDER NON-C	100	NFORM	MANCE / UPDATE		-	<del></del>	2
. <u>.</u>										··· <b>·</b>	QA Clos	ed:	Date	•
Vork Ord	er:						DISPOSITION			AGAINST D	EPARTME	NT/	PROCESS	
	Part No.  NCR No.						Rework Scrap Use-as-is Work Order Update		! Therm	Skid-tube Crosstube  Machining Small Fab  noforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root					Desc	crip	tion of work order update		nitial	Action	Sign 8	Ž		· · · · · · · · · · · · · · · · · · ·
Cause		Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Description	Date	:	Verification	QC Inspector
oc/Data puip/Tooling perator laterial etup ther rocess upplier raining							4							
							General	AUL	T CATE	GORY	<del></del>			
Landi		Bending Centre No Cracks Crushed/C Cuffs Heat Trea Inspectior Ripples in Torque W	Crimped, t n Strip in Bend 'aves in E	Tube			Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing	-	Instruct Mainte Mislabe Misread Offset Out of O	on Incomplete ioris Incomplete/Unclear enance eled I	Ovalized Over/Un Part Inco Part Loss Part Mo Position Power Loss	orrect/Mi ved ed W	ssing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Turning So	equence		I		Finish		Out of S	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## **Picklist Print**

December-19-12 1:30:49 PM

Work Order ID:

94641

Parent Item:

D3121-141

Parent Item Name:

Bracket Assembly

**Start Date:** 12/24/12

Required Date: 1/11/13

Page 1

**Start Qty: 12.00** 

Required Qty: 12.00

Comments:

IPP Rev:Pick:A04.02.18New issueKJ/DS

IPP Rev:B ECN 1060 07-11-12 DD verified by: EC

IPP Rev:C New Dimensions for Blank Size 08-07-23 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status /
D3121-21		Manufactured	No			140	Each	48.0000	1	12	]][	1/3 /	00/
Bolt									e =======			$\sim 10^{\circ}$	
				<b>Location</b>		Loc Qty	<u>L</u>	oc Code			//	,	//
				ST235		48				/	/ _	. ^	
				797	32	4			·	/	-42	945	700 i
				856		1					$\mathcal{C}$	) [ [	
				894		1							
				899		8				<del></del>		,	
				923	66	34		52,0000					/ /
3121-241		Manufactured	No			100	Each	53.0000		12	/ /	5/3/	12/0
Bearing Assembly									rend and a second a				
				<b>Location</b>		Loc Qty	L	oc Code					•
				FG	,	4				— //		29  tr	971
				898	326	4			<del></del>	/	_	レドシ	1dt
				ST235A		49						<u>-</u>	
				919	954	49				<del></del>			
M174B1.250X02.000		Purchased	No			140	f	28.3653	0.55	6.947368	34		
7-4 SS Bar 1.250 x 2.00												17.00	
				<b>Location</b>		Loc Oty	<u>L</u>	oc Code					
				MAT049		28.3653							
					1899	2							
					9231	2							
					2244	6.23							
				12:	3294	18.1353							

M124081

6.95

and 13/01/20

													DQA:	Date	:	` .
NCR:	/es	/ No		•			WORK ORDER NON-C		NFOR	MA,	NCE / UP	DATE				2
			•			_							QA Closed:	Date	:	
Work Orde	er:						DISPOSITION					AGAINST DI	EPARTMENT,	/PROCESS	-	
Part N							Rework Scrap Use-as-is		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing				4	Water Jet d. Eng. Coor. re/Packaging	Eng	gineering Quality Other
NCR I	No.						Work Order Update				ge Fab	Composite	1 1100/3101	Supplier		
Root					Desc	rip	tion of work order update		nitial		Ac	tion	Sign &	· · · · · · · · · · · · · · · · · · ·		
Cause		Date	Step	Qty	,	0	r Non-conformance	Ch	ief Eng	<u>L</u>	Desc	cription	Date	Verification		QC Inspector
oc/Data			į							1						
quip/Tooling			į								·					
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1aterial		,													٠.	
etup		,	l													
ther										Ì				į		:
rocess			•					:								
upplier																
raining			· •													
inapproved																
							F	AUL	T CÁTE	GOF	RY					
Landi	ng (	ear					General									
		Bending					Bend		Grain				Ovalized		Press	sure/Forced
		Centre No	ot Concer	ntric to (	o/s		BOM/Route		Hardwa	are			Over/Under	tolerance	Tem	perature/Cure
		Cracks			Ī		Broken/Damaged		Inspect	ion l	ncomplete		Part Incorre	ct	Weld	i e
		Crushed/	Crimped.				Burrs		Instruct	tions	Incomplete/	/Unclear	Part Lost/M	issing	Wro	ng Stock Pulled
^		Cuffs					Contamination		Mainte				Part Moved	_		
		Heat Trea	at		Ī		Countersink		Mislabe	eled		<u> </u>	Positioned V	Vrong		
		Inspectio	n Strip in	Tube	ľ		Cut Too Short		Misread	d			Power Loss/		Othe	er
		Ripples in			Ī	$\overline{}$	Drill Holes		Offset			_		· L.	<u> </u>	
		Torque W	Vaves in E	xtrusion	n t		Drawing		Out of (	Calib	ration				·····	·
		Turning S			ľ	_	Finish		Out of Sequence							

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LT	.D		Work Order:	94641
Description: Bracket			Part Number:	D3121-111
	-	4		
Inspection Dwg: D3121	Rev: E			Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

					· · · · · · · · · · · · · · · · · · ·	
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000	0,3925	V			0Fe-02
0.75	+/-0.030	0.749	V			09e-01
0.375	+/-0.010	0.374			_	(1
2.14	+/-0.030	2,130	<b>√</b>			٠(
1.96	+/-0.030	1.904	V			CL
0.280	+/-0.010	0.279				l (
3.330	+/-0.010	3,330	V			C
3.630	+/-0.010	3.629				c i
R0.25	+/-0.030	R025	~			Ofe
R0.375	+/-0.010	R0315				OFE
Ø0.201	+0.005/-0.001	0.203	<b>V</b>			OFEOI
0.100	+/-0.010	0.097	<b>√</b>			U
4.580	+/-0.010	4.579	<b>/</b>			<u>u</u>
						مد ( ه م ۱
6.18	+/-0.030	6.182	\ <u>\</u>			SHOUL
5.89	+/-0.030	5.892	<u> </u>			<u> </u>
0.080	+/-0.010	6.078	<u> </u>			٠( .
0.300	+/-0.010	0298				· Cc
30°	+/-0.1°	300	<b>✓</b> ,			OFG
R0.25	+/-0.030	R.O.25				Of C
0.130	+/-0.010	0.129	<i>\( \)</i>			OKG-67_
0.664	+/-0.010	Oeddo				3606
0.381	+/-0.010	0317	<i>V</i> ,			Oferal
0.201	+/-0.010	0199	V,			10
0.400	+/-0.010	0397	V			4
0.580	+/-0.010	0577	$\sim$			V(
100°	+/-0.1°	1000	<b>V</b>			OPE
0.032	+0.000/-0.010	0.030	<b>V</b>			GA-08

Measured by: SFC B.A Audited by: Audited by: Prototype Approval: N/A

Date: 2013-01-27

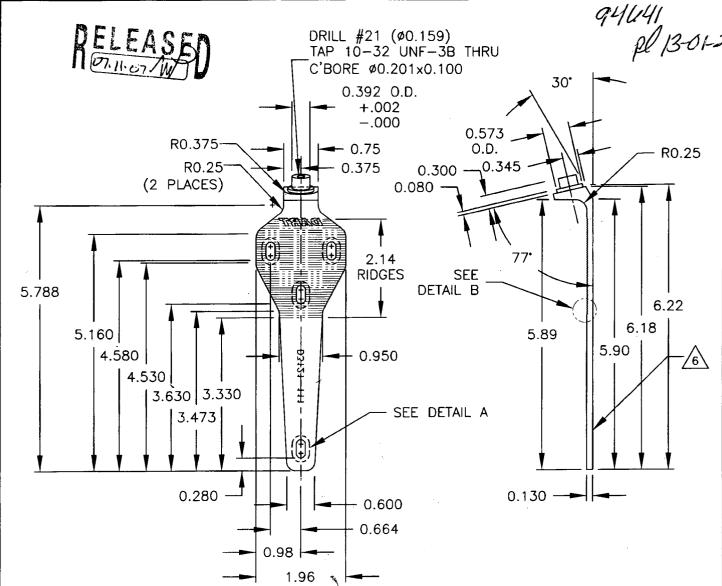
Date: 13/01/30

Date: N/A

Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D3121-141	KJ/RF	
В	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated \	KJ/JLM	
D	08.01.16	Dimensions updated per Dwg Rev. E	KJ/EC/DD	
E	08.05.28	Tolerance revised for Ø0.201 dimension	KJ/DD	



DESIGN #	DRAWN BY	DART AEROSP HAWKESBURY, ONTARI	
CHECKED	APPROVED	DRAWING NO.	REV. E
411		D3121	SHEET 7 OF 10
DATE	•	TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



## D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

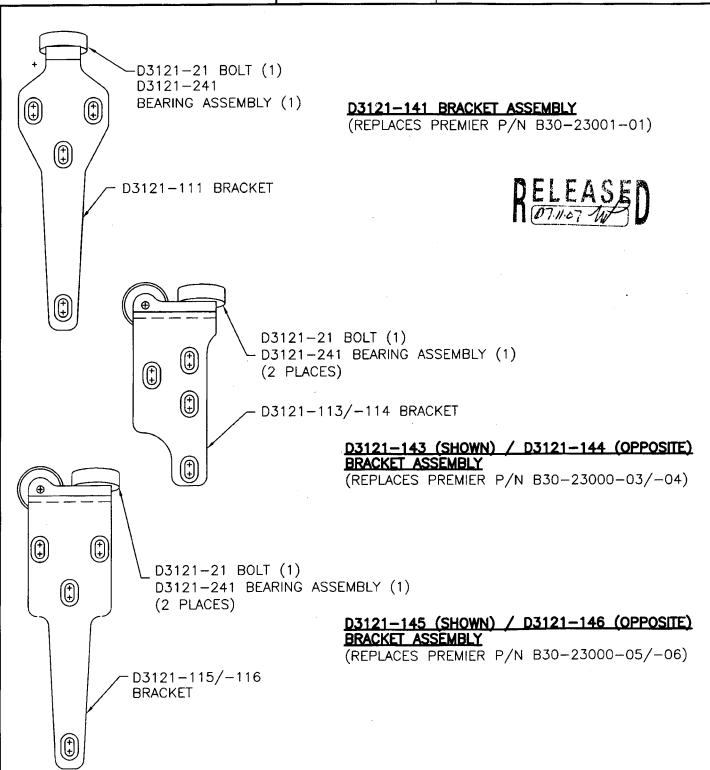
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DESIGN	DRAWN BY	DART AEROSP HAWKESBURY, ONTARI	
CHECKED	APPROVED	DRAWING NO.	REV. E
4		D3121	SHEET 2 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



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